



Dart Aerospace Ltd.  
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K6A 1K7  
Canada

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**RBW109-3101-58-2-5**  
**Job Sheet 194595**



**Part No:** RBW109-3101-58-2-5

**Job Qty:** 10 pcs

**Part Name:** Shaft



**Part Weight:** 0 lbs

**Status:** New

**Priority:** Medium

**Job Created:** 5/6/19

**Job Tracking No:**

**Due Date:** 6/14/19

**Created By:** Marie Lajeunesse

**Type:** Stock

**Description:**

**Note:** DWG RBW109-3101-58-2 Rev 3 TEO17-641 IPP Rev A 17.12.12 New issue DP Verify DD

**Ship Via:**

### Bill of Materials

### Job Routing

| Op<br>No | Operation              | Qty    | Start Date | Due<br>Date | Standard     |            | Workcenter/Supplier    |           | Sign-off |
|----------|------------------------|--------|------------|-------------|--------------|------------|------------------------|-----------|----------|
|          |                        |        |            |             | Setup<br>Hrs | Run<br>Hrs | Workcenter / Supplier  | Lead Time |          |
| 100      | Conventional Lathe - 1 | 10 pcs | 6/14/19    | 6/14/19     | 0.00         | 1.00       | Conventional Lathe - 1 |           |          |
|          |                        |        |            |             |              |            | Conventional Lathe - 2 |           |          |
| 110      | QC 2                   | 10 pcs | 6/14/19    | 6/14/19     | 0.00         | 0.00       | QC 2 - 1               |           |          |
|          |                        |        |            |             |              |            | QC 2 - 12              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 14              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 17              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 19              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 2               |           |          |
|          |                        |        |            |             |              |            | QC 2 - 20              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 22              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 23              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 25              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 32              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 33              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 35              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 39              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 4               |           |          |
|          |                        |        |            |             |              |            | QC 2 - 40              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 44              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 45              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 48              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 49              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 50              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 51              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 52              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 57              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 62              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 63              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 8               |           |          |
|          |                        |        |            |             |              |            | QC 2 - 66              |           |          |
|          |                        |        |            |             |              |            | QC 2 - 64              |           |          |



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**Container No:** S182849



**Part:** RBW109-3101-58-2-5

**Job No:** 194595

**Serial No/Batch:** S182849

**Revision:** 3

**Inspector:**

**Exp Date:**

**Instructions:**

**Date:** 05/22/19

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|                                 |        |         |           |                        |                                           |
|---------------------------------|--------|---------|-----------|------------------------|-------------------------------------------|
| 120 QC 8                        | 10 pcs | 6/14/19 | 0.00 0.00 | QC 2 - 65              |                                           |
|                                 |        |         |           | QC 2 - 5               |                                           |
|                                 |        |         |           | QC 2 - 71              |                                           |
|                                 |        |         |           | QC 8 - 12              | Done 19/05/23                             |
|                                 |        |         |           | QC 8 - 14              |                                           |
|                                 |        |         |           | QC 8 - 17              |                                           |
|                                 |        |         |           | QC 8 - 20              |                                           |
|                                 |        |         |           | QC 8 - 25              |                                           |
|                                 |        |         |           | QC 8 - 3               |                                           |
|                                 |        |         |           | QC 8 - 32              |                                           |
|                                 |        |         |           | QC 8 - 33              |                                           |
|                                 |        |         |           | QC 8 - 35              |                                           |
|                                 |        |         |           | QC 8 - 39              |                                           |
|                                 |        |         |           | QC 8 - 4               |                                           |
|                                 |        |         |           | QC 8 - 44              |                                           |
|                                 |        |         |           | QC 8 - 45              |                                           |
|                                 |        |         |           | QC 8 - 49              |                                           |
|                                 |        |         |           | QC 8 - 58              |                                           |
|                                 |        |         |           | QC 8 - 8               |                                           |
|                                 |        |         |           | QC 8 - 9               |                                           |
|                                 |        |         |           | QC 8 - 68              |                                           |
|                                 |        |         |           | QC 8 - 67              |                                           |
|                                 |        |         |           | QC 8 - 1 (A)           |                                           |
|                                 |        |         |           | QC 8 - 47              |                                           |
|                                 |        |         |           | QC 8 - 40              |                                           |
|                                 |        |         |           | QC 8 - 52              |                                           |
|                                 |        |         |           | QC 8 - 23              |                                           |
| 130 Packaging 3-1 - Stock - B4B | 10 pcs | 6/14/19 | 0.00 0.00 | Packaging 3 - 1 - B4B  |                                           |
|                                 |        |         |           | Packaging 3 - 2 - B4B  |                                           |
|                                 |        |         |           | Packaging 3 - 3 - B4B  |                                           |
|                                 |        |         |           | Packaging 3 - 4 - B4B  |                                           |
|                                 |        |         |           | Packaging 3 - 5 - B4B  |                                           |
|                                 |        |         |           | Packaging 3 - 6 - B4B  |                                           |
|                                 |        |         |           | Packaging 3 - 7 - B4B  |                                           |
|                                 |        |         |           | Packaging 3 - 8 - B4B  |                                           |
|                                 |        |         |           | Packaging 3 - 9 - B4B  |                                           |
|                                 |        |         |           | Packaging 3 - 10 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 11 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 12 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 13 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 14 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 15 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 16 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 17 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 18 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 19 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 20 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 21 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 22 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 23 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 24 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 25 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 26 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 27 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 28 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 29 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 30 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 31 - B4B |                                           |
|                                 |        |         |           | Packaging 3 - 32 - B4B |                                           |
|                                 |        |         |           |                        | Plex 5/6/19 7:41 AM Dart.lajeunesse.marie |

|                                                                                                                                                                                                                                        |                       |                 |                            |                        |                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------|----------------------------|------------------------|------------------|
|                                                                                                                                                                                                                                        |                       |                 |                            | Packaging 3 - 33 - B4B |                  |
|                                                                                                                                                                                                                                        |                       |                 |                            | Packaging 3 - 34 - B4B |                  |
|                                                                                                                                                                                                                                        |                       |                 |                            | Packaging 3 - 35 - B4B |                  |
|                                                                                                                                                                                                                                        |                       |                 |                            | Packaging 3 - 36 - B4B |                  |
| 140                                                                                                                                                                                                                                    | QC 21 - SA            | 10 pcs          | 6/14/19                    | 0.00 0.00              | QC 21 - SA - 21  |
|                                                                                                                                                                                                                                        |                       |                 |                            |                        | DAS              |
|                                                                                                                                                                                                                                        |                       |                 |                            |                        | 21 MAY 24 2019   |
|                                                                                                                                                                                                                                        |                       |                 |                            |                        | 9-59             |
| Part Op 100 - (Manufacture as per dwg) -Cut to length as per DWG.<br>Descriptions: 110 - (QC2- Inspect parts off machine FAI/FAIB)<br>120 - (QC8- Inspect parts - second check)<br>130 - (Identify as per dwg & Stock Location: _____) |                       |                 |                            |                        |                  |
| <b>Job BOM</b>                                                                                                                                                                                                                         |                       |                 |                            |                        |                  |
| <b>Part / Item</b>                                                                                                                                                                                                                     | <b>Component Name</b> | <b>Quantity</b> | <b>Operation</b>           |                        | <b>Container</b> |
| 8908K62                                                                                                                                                                                                                                | Shaft                 | 5 ft (.5 ea)    | 100-Conventional Lathe - 1 |                        | S016487          |
| <b>Job Allocations</b>                                                                                                                                                                                                                 |                       |                 |                            |                        |                  |
| <b>Operation</b>                                                                                                                                                                                                                       | <b>Component Part</b> | <b>Required</b> | <b>Inventory</b>           | <b>Allocated</b>       |                  |
| 100-Conventional Lathe - 1                                                                                                                                                                                                             | 8908K62               | 5               | 125                        | 0                      |                  |
| <b>Part Specifications</b>                                                                                                                                                                                                             |                       |                 |                            |                        |                  |
| Specifications could not be found.                                                                                                                                                                                                     |                       |                 |                            |                        |                  |

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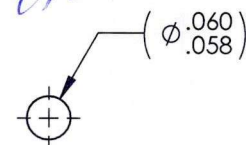
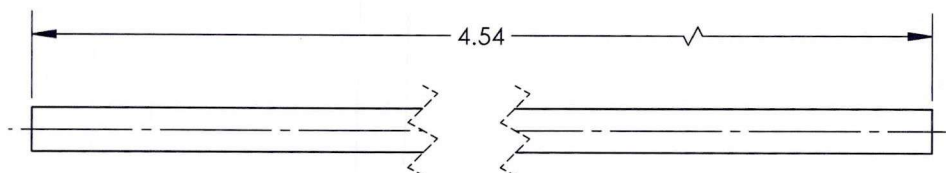


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| REVISIONS |         |                                         |           |         |          |
|-----------|---------|-----------------------------------------|-----------|---------|----------|
| REV       | ECR     | DESCRIPTION                             | DATE      | INITIAL | APPROVED |
| 2         | 16-0246 | -5 CH'D DIM WAS(Ø.059) IS (Ø.060/.058). | 12/2/2016 | SM      | JAG      |

**TEO ATTACHED**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 194595MJS  
1905-06



(-5)  
SHAFT

|                                                                |                              |
|----------------------------------------------------------------|------------------------------|
| <b>DART<br/>AEROSPACE</b>                                      |                              |
| TITLE HAMMER, ALUMINUM, BLADE<br>CORROSION AND VOIDS DETECTION |                              |
| DWG NO. RBW109-3101-58-2-5                                     | REV 3                        |
| MAT'L S.S.                                                     | UNLESS OTHERWISE SPECIFIED   |
| HEAT TREAT                                                     | DIMENSIONS ARE IN INCHES     |
| FINISH                                                         | .XXX ± .005 FRACTIONS ± 1/8  |
| SPEC                                                           | .XX ± .01 ANGLES ± 5°        |
|                                                                | .X ± .1 SURFACES = 125/      |
| DRAWN BY: DUERFELDT                                            | 1. BREAK ALL SHARP EDGES     |
| CHECKED: DUERFELDT                                             | .015 x 45° OR .015R          |
| OPPS APPR: ANDERSON                                            | 2. DIMENSIONAL LIMITS APPLY  |
| QA APPR: LINDSAY                                               | AFTER PLATING                |
| APPROVED: GILBERT                                              | 3. INTERPRET DIM AND TOL PER |
|                                                                | ASME Y14.5M-2009             |
| SCALE 4:1                                                      | USED ON MODEL                |
| DATE 3/12/2015                                                 | AW109/AW119                  |
| SHEET 4 OF 5                                                   |                              |

Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |              |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------|--|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                        | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Quality <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                        |              |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                  | Sequence #:                                                                                                                       | QTY Affected :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | MRB (QSI042) |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Disposition            |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Completed By           |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Lead hand / Supervisor |              |  |
|                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | QC / QA Coordinator    |              |  |
| <b>Root Cause</b><br><br>Operator <input type="checkbox"/><br>Manufacturing Process <input type="checkbox"/><br>Equip/Tooling <input type="checkbox"/><br>Handling/Preservation <input type="checkbox"/><br>Material <input type="checkbox"/><br>Product Improvement <input type="checkbox"/><br>Process Improvement <input type="checkbox"/><br>Human Factors <input type="checkbox"/> |                                                                                                                                   | <b>FAULT CATEGORY</b><br><br><div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> <div> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |                        |              |  |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                        |              |  |